Electronic Version
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MOTOR SWITCH CELL

Abstract

A motor switch cell is provided comprising a switch cell actuator slidably engaged to a switch cell base. The switch cell actuator is slidable between a neutral actuator position and a first active actuator position. A first neutral contact element is positioned within the switch cell base. A first active contact element is also positioned within the switch cell base. A first contactor element, positioned within the switch cell base, is rotatable between a neutral first contactor position and an active first contactor position. The first contactor element includes an upper first contactor edge and a lower first contactor edge. The first contactor element generates electrical communication between the first neutral contact element and the first active contact element when in the active first contactor position. A first contactor ramp profile is formed on the upper first contactor edge and includes a first contactor neutral center point and a first contactor active outer edge. The first contactor active outer edge is positioned closer to the switch cell actuator than the first contactor neutral center point. A first contactor pivot is positioned between the first contactor neutral cen-

ter point and the first active contact. A first roller cam follower assembly is mounted to the switch cell actuator and includes a first roller engagement tip rotatably engaging the first contactor ramp profile. The first roller cam follower assembly rotates the first contactor element from the neutral first contactor position to the active first contactor position as the first roller cam follower assembly moves from the first contactor neutral center point towards the first contactor active outer edge in response to the switch cell actuator moving to the first active actuator position.